

AE-771

M.Sc. (Previous)

Term End Examination, 2016-17

BOTANY

Paper - IV

Plant Physiology and Metabolism

Time : Three Hours] [Maximum Marks : 100

[Minimum Pass Marks : 36

Note : Answer any **four** questions. All questions carry equal marks. Draw well labelled diagram wherever necessary.

1. Give an illustrative account on nature, properties of enzyme and its biological significance in Plant Physiology.
2. What is Transpiration ? How is stomata operated ? Mention its various factors affecting this process.
3. What essential elements are necessary for the normal development of green plants ?

(2)

4. Give a detailed account on Translocation of organic solute in green plant.
5. Write notes on the following :
 - (a) Crassulacean Acid Metabolism
 - (b) Photorespiration and its significance
6. What is Auxin ? Write its mode of action and various practical applications in agriculture.
7. Write short notes on any **two** of the following :
 - (a) T.C.A. Cycle
 - (b) Biological Nitrogen Fixation
 - (c) Photoperiodism and its significance
8. Write notes on the following :
 - (a) Stress Physiology
 - (b) Sensory Photobiology
